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THE  
**EXCELSIOR ✱ SQUARE,**

A SYSTEM

For Cutting Ladies' and Children's Garments.

INVENTED BY

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MR. and MRS. B. T. PHELPS,

BELLOWS FALLS, VERMONT.



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## INTRODUCTORY REMARKS.

Since the publication and introduction of the first edition of the Instructions for the use of the Excelsior Square (the only actual glove-fitting system in existence), it can be truthfully said that the Excelsior Square system for cutting ladies' and children's garments has proven to be far more excellent than the inventors even dared to hope for it in the beginning, and has been in use seven years, having been introduced in all the large towns and cities in the United States, has taken the first rank and become the leading System over all others.

This is an age of progression, and there is no good reason why the science of dress-making should not attain that degree of advancement and perfection which has been given to many other branches of business on which the best inventive talent and skill of the land has been expended. We have long observed the great necessity that is felt by almost every lady in the land for the need of a better, less complex, more accurate system for cutting ladies' and children's garments.

There are a few (so-called) first-class systems for dress cutting of considerable merit, but we venture to say that there are none that are universally accepted as being perfect, first-class systems in every respect; being either very inferior or too complicated to be understood and appreciated by the average dress-maker.

Dress-makers must not be deceived into the fallacious idea of believing that all the (so-called) measurement systems are alike, for they are not, but are widely different, both in the mode of drafting and in the manner of construction, and while some are very good, others are no better than the poorest kind of chart, and are in reality based upon the same principles. Charts and other inferior systems would do once, but the world surely moves and they must give way to something better.

No system that requires the taking of only three or four measures can be expected to be very accurate, for there must necessarily be more or less changing of seams. There is not, nor can there ever be, a system so constructed as to procure a stylish, perfect fitting garment when the system is so scaled, or the rules given for drafting are based upon any particular measure other than the measure taken to correspond with that portion of the figure the garment is intended to fit. If every figure was symmetrical in form it would be practical, but as they are not it is utterly impossible.

There is only one way, and that is to take a measure for each and every portion of the figure the garment is intended to fit, and by certain rules which we have adopted, based wholly upon mathematical principles, we are enabled to fit every figure, whether regular or irregular in proportion, or of any dimensions, without the slightest change of seams. All that is necessary is to take a correct measure, and to draft properly.

It is of the greatest importance to every dress-maker in the land, and especially to every young lady who is learning or intends to learn dress-making, to procure the very best method they can get, as the art of cutting and fitting perfectly is the only basis upon which a successful business can be established, for no amount of trimming and draping can suffice for an ill-fitting garment.

The way to procure a stylish, perfect garment, is not by using some chart or other poor system, neither by pinning to the form, nor cutting by pattern, taking the impression of the form, as it is sometimes termed, which is nothing more or less than taking a piece of muslin made for that purpose and fitting it to the figure, shaping a pattern by which the garment is cut. This method takes too much valuable time (and time is money), also years of experience, and but very few are even then first-class cutters; the most expert cannot cut and fit in that or any other way as perfect, easy-fitting and stylish a garment as we guarantee can be done, with but very little experience, by the Excelsior Square, and without any refitting whatever (incredible as it may seem to some), which we can fully demonstrate to the entire satisfaction of the most incredulous.

Dress-makers cannot afford to spend too much valuable time trying on garments and refitting them, when it can all be done without, by using the Excelsior Square. No one can fail to see the importance of keeping up with the times, for she who does the best work and cuts the most stylish and best fitting garment that the lady can wear with ease and comfort, is sure to get the most and best custom.

The Excelsior Square is the only system in existence where every measure taken is each independent of itself and not affected in any way by any other measure, unlike all other systems, where the breast measure regulates the neck, shoulder and arm shape, and as there are no two forms exactly alike, it is impossible to always get a perfect fit, which we claim for the Excelsior Square. It requires but very little practice to be able to cut any style of garment by referring to the various reports of the fashion plates as they appear from time to time. The system and style of drafting being so arranged that the relative position of seams does not alter the fit of the garment and may be changed at will. All that is necessary to meet the requirements of the prevailing fashions is to become thoroughly acquainted with the fundamental principles of the system. It is especially adapted for cutting cloaks

and children's garments. It is just as easy to cut for a child as for an adult.

The difficulty experienced by nearly all dress-makers in fitting a garment nicely over the hips is entirely obviated.

The pattern, when drafted correctly, will correspond with each and every measure, there being a measure taken for every part of the garment, and the measures are easily taken and are not difficult to understand; neither are the rules for drafting hard to learn, even to those who have never done dress-making. In fact, we have intended to make our system so plain and simple that "He who runs may read" and understand perfectly.

The reason so many ladies have failed to make dress-making a success is because they have not had a good system to cut by. She has no one but herself to blame in this age of progression, who fails to at least investigate when a first-class measurement system is shown to her. The numerous charts and worthless systems, many of which have been in use for a long time, should be consigned to oblivion or laid upon the shelf as relics of the past.

In offering the Excelsior Square to the public all we ask is that it be given a fair and impartial trial and judged according to its merits.

Yours respectfully,

MR. & MRS. B. T. PHELPS.

## THE EXCELSIOR SQUARE DEFINED.

### With Suggestions for its use.

The Excelsior Square is a Rule divided and subdivided into inches and parts of inches, with various Scales on either side of the Square representing the different measures taken of the person for whom the garment is to be drafted, and is designated as follows :

1. By the Long Arm (which is twenty inches long).
2. The Short Arm (which is ten inches long).
3. The Corner (which is at the point where the Long and Short Arm are joined together).
4. The Curved End (which is on the inside of Long Arm of Square and is used to form the darts and the various curved lines that are required in drafting the different styles of garments).
5. The Inside of the Square (which is that portion where Scales C, Back, Shoulder, Backarm, width of Back, Front waist Scales and the Curve are situated).
6. The Outside of the Square (which is on the straight side of the Long Arm, and the corresponding side of the Short Arm).
7. The Front Side (is the side upon which are found the Scales by which the front is drafted).
8. The Back of the Square (is the side upon which are found the Scales by which the Back is drafted).
9. The Back Neck Scale, on Short Arm of Square is used in drafting the Back Neck, which is represented by figures corresponding with the size of the Neck Measure.
10. The Back Shoulder Scale, on Short Arm of Square, is used to find the Slope of Shoulder in back drafting, and is represented by figures corresponding with the length of Shoulder Measure.
11. The Back Arm Scale, situated on inside of Short Arm of Square, is used to obtain the width of Back Arm Shape, and is represented by figures corresponding with the size of Arm Measure.
12. The Width of Back Scale is situated on the inside of Long Arm of Square and is used to obtain the width of Back, and is repre-

sented by figures corresponding with the width of Back Measure.

13. The Back Waist Scales are situated on the outside of Long Arm of Square. No. 1 Scale is used to obtain the proper width of the Center Back. No. 2 Scale is used to obtain the Size of Back Waist, and are both represented by figures corresponding with Size of Waist Measure.

14. The Back Shoulder Scale is situated on the inside of Long Arm of Square at the Curved End and is used to obtain the desired length of Back Shoulder, and is represented by figures corresponding with the Shoulder Measure.

15. The Front Neck Scale is situated on the outside of Long Arm of Square and is used in drafting the Front Neck, and is represented by figures corresponding with the Size of Neck Measure.

16. The Size of Breast Scale is situated on the outside of Long Arm of Square and is used to obtain the Size of Breast, also to obtain the Size of Arm, and is represented by figures corresponding with both the Size of Breast and size of Arm Measures.

17. The front Shoulder Scale is situated on the outside of the Short Arm of Square and is used to obtain the Front Shoulder Slope and is represented by figures corresponding with the Shoulder Measure.

18. The Front Neck Scale that is situated on the outside of the Short Arm of Square is used to obtain the Height of Neck in front at the front hem line and is represented by figures corresponding with the Neck Measure.

19. The Front Arm Scale is situated on the inside of Short Arm of Square and is used to obtain the depth of Arm Size at the Armpit and is represented by figures corresponding with the size of Arm Measure.

20. Scale C is situated on the inside of Long Arm of Square and is used to obtain the proper width or space that the front dart should be placed from the front hem line and is represented by figures corresponding with the size of Waist Measure.

21. The Front Waist Scale is situated on the inside of Long Arm of Square and is used to obtain the Size of Waist and is represented by figures corresponding with the size of Waist Measure.

22. The scholar should be particular to study carefully the foregoing explanation, as it is essential to thoroughly understand the Square

and its use before commencing to draft; also to study the different cuts or diagrams. The dots being lettered and the lines numbered, a careful perusal and examination of the same will enable the scholar to better understand the rules given and greatly facilitate the drafting.

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## RULES FOR TAKING THE MEASURE.

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1. Ascertain the Size of Neck by taking a close measure inside of collar.

2. Length of Back is obtained by measuring from prominent bone in back of neck to the full length of natural waist.

3. Length of Shoulder is obtained by measuring from the Neck at a point where the shoulder seam should be, the desired length of Shoulder.

4. The size of Arm is obtained by passing the tape under the arm and over the point of Shoulder. A close measure should be taken.

5. Width of Back is obtained by measuring from the side seam at the bottom of back arm shape across the fullest part of back to the opposite side.

6. Size of Waist is obtained by passing the tape around the small part of Waist. The exact measure should be taken, then deduct two inches and use that number to draft by.

7. Length Under Arm is obtained by placing end of tape measure close up under the Arm and measure down to the Hips at the Waist line.

8. Size of Breast is obtained by placing the tape measure over the fullest part of the Bust, the tape passing around the body close up under the Arms at the armpit and over the broadest part of the Back. Now deduct width of Back already taken and the remainder will be the size of Breast Measure.

9. Height of Dart is obtained by placing the end of tape at the prominent bone in back of Neck. Now pass the tape over the Right Shoulder close up to the Neck to the fullest part of Bust, at a point where the height of first Dart should be.

10. Length of Front is obtained by placing the end of tape at the prominent bone in the Back of Neck; now pass the tape over the Right Shoulder close up to the neck, and over the fullest part of the Bust, to the proper length of Waist in front. (The length of front should be taken without removing tape after Height of Dart is taken to save replacing tape).

11. Width of Chest.—Place tape at the point inside of Shoulder bone and measure across the Chest at the throat to the opposite side. A narrow measure should be taken.

12. Size of Hips is obtained by passing the tape around the body over the fullest part of the Hips, about four inches below the natural Waist.

13. Length of Arm is taken by raising the Right Arm in the form of a Square, measuring from the Point of Shoulder to the prominent bone in the Wrist.

14. Length of Arm to Elbow is obtained by measuring from the Point of Shoulder to Elbow joint.

15. Size of Elbow is obtained by measuring around the Arm at Elbow. (The Arm should be bent to prevent taking the measure too small.

16. Size of Wrist is obtained by measuring round the Wrist or Hand.

17. Length of Skirt is obtained by measuring from the Waist line the desired length of Skirt.

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## Important Suggestions on Taking the Measures.

1. Width of chest measure must be taken narrow, if not there will be too much cloth and the dress will have to be turned away at front hem line.

2. If the neck measure is taken too loose the neck will not only be too large, but there will be a looseness at the shoulder seam near the neck and is liable to cut too low at the front hem line.

3. If the length of back is taken too long it will cause the garment to be too high in the back neck, causing cross wrinkles at the neck.

4. The length of shoulder must not be taken too short, for it will spoil the style and beauty of the garment; it had better be taken too long than too short, for if too long it can be cut off, but if too short there is no remedy after the garment is cut.

5. If the size of arm measure is taken too loose it will cause a looseness at the shoulder and give too much depth to the arm shape, and make the arm hole too large.

6. If the length of front is taken too long it will cause the garment to roll up at the waist line and make wrinkles, otherwise the waist line will be too low, in that case it would be too tight below the waist line in front.

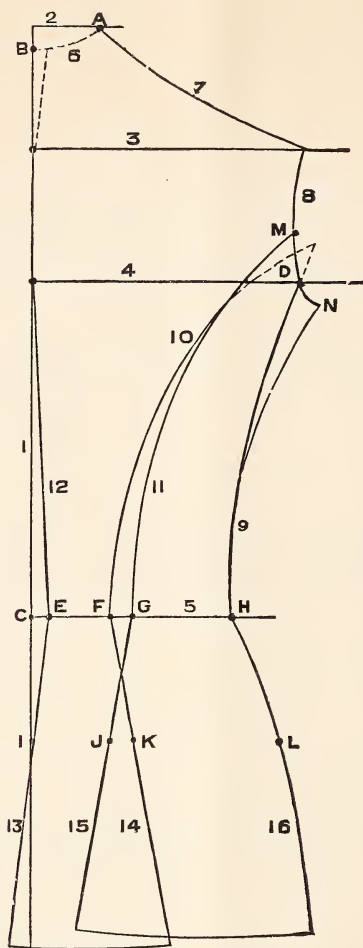
7. The size of waist measure must be drafted two inches less than the garment is to be when finished, as it will gain that amount in tracing and making.

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## Great Care should be Exercised in Taking the Measure

For it will be next to an impossibility to obtain a perfect fitting garment unless a correct measure has been taken. Never be governed by the dress the lady has on, for it may be very ill fitting. Neither be influenced in any manner what the lady says in regard to making the garment long waisted, for there *is only one way* and that is to take the measure the full length of natural waist and no more (be it long or short). You are supposed to understand the system and know better how to take the measures than the lady whom you are fitting; all that is necessary for you to understand from her is whether she wants the garment close or loose fitting and the style she wants it cut. The drafting should also be performed with precision, as a slight variation of the Square will throw the seams out of their proper position. After the garment has been drafted, traced and cut out, the next thing to be done is to baste it up properly, for if it is not rightly basted no garment can be expected to fit well. When this has been done a perfect-fitting garment is guaranteed in all cases, without the slightest change of seam. Be thorough in every particular, for what is worth doing at all is worth doing well.

FIG. I.



A DIAGRAM REPRESENTING THE BACK FOR A TIGHT-FITTING BASQUE.

## Rules for Drafting.

1. Place the Long Arm of Square on paper towards you, one and one-half inches from the edge, the Short Arm to the left and near the edge of the paper, and draw lines 1 and 2.

2. Without moving Square make dot A, on line 2, the size of neck, using Back Neck scale on Short Arm of Square.

3. Make dot B, on line 1, one-fourth of an inch below the junction of lines 1 and 2.

4. Make dot C, on line 1, one-fourth of an inch more than the length of back measure, below the junction of lines 1 and 2.

5. Move the Square, place the Short Arm on line 1; the Length of Shoulder, as represented by Back Shoulder Scale at the junction of lines 1 and 2. (If the Shoulder Measure is more than seven inches, place the figure 7 of the scale at the junction of lines 1 and 2, and draw line 3 at Long Arm of Square from line 1.)

6. Move the Square down on line 1; place the inside of Short Arm on line 1, at the junction of lines 1 and 3, and draw line 4 at the inside of Long Arm and make dot D the width of Back measure.

7. Move the Square down; place the corner at dot C; Short Arm on line 1 and draw line 5 from dot C at Long Arm of Square, and make dot E on line 5, one-half inch from dot C. Make dot F on line 5, the size of Waist measure, using the Back Waist Scale No. 1. Make dot G one-half inch from dot F. Make dot H the size of Waist Measure, using the Back Waist Scale No. 2.

NOTE.—Before moving the Square, note the distance from dot C on line 1 to the junction of lines 1 and 4, and if the distance is *less* than the length of Under Arm Measure, line 4 *must* be raised to the point indicating the length of Under Arm Measure. Now draw a new line from that point and make dot D on that line.

If the distance from dot C and the junction of lines 1 and 4 be *more* than the length of the Under Arm Measure, line 4 should not be changed.

When line 4 is raised, line 3 (the shoulder slope) must be raised the same amount.

8. Move square down; Short Arm on line 1, the Corner of Square four inches below dot C, and make dot I at Corner of Square on line 1. Make dot J the size of Waist Measure, using the Back Waist Scale No. 1. Make dot K one-half inch beyond dot J. Make dot L one actual inch more than the size of Waist Measure, using Back Waist Scale No. 2. (That is, dot L should be one inch further from dot I than dot H is from dot C.)

9. Draw line 6 (the back neck) from dot B to dot A.

10. Place Curved End of Square at dot A, the inside of Long Arm crossing line 3, at the Length of Shoulder Measure, using the Back Shoulder Scale, and draw line 7 from dot A to line 3.

11. Remove the Square; place the Curved End at the junction of lines 3 and 7, the inside of Long Arm resting at dot D, and draw line 8 from the Shoulder Line to dot D.

12. Move Square down, place the Curved end at dot D, the inside of Long Arm resting at dot H, and draw line 9 from dot D to dot H. Make dot M on line 8, one-half of the distance between dot D and the junction of lines 3 and 7, above dot D.

13. Place Curved End of Square at dot M inside of Long Arm on dot C and draw curved line four inches down. Now move Square down to the end of line drawn; also place inside of Long Arm of Square at dot F and continue line 10 to dot F, and without moving the *Curved End* of Square, place the inside of Long Arm at dot G. Now draw line 11 from the Curved End of Square to dot G. (See diagram.)

14. Draw line 12 from the junction of lines 1 and 3 to dot E.

15. Draw line 13 from dot E, through dot I, the length of skirt.

16. Draw line 14 from dot F, through dot K, the length of skirt.

17. Draw line 15 from dot G, through dot J, the length of skirt.

18. Turn the Square over and place the Curved End at dot H, the inside of Long Arm from you and resting at dot L, and draw line 16 the length of skirt.

19. Dot N is obtained by placing the Short Arm of Square on line 4 the corner one-half inch beyond dot D. Now make dot N on long arm one-half inch below line 4, then draw a line with Curved End of Square from dot N to line 9 and extend line 8 to dot N (see diagram). This addition may be made or omitted, according to the figure and the taste of the artist; when this addition is made, the same amount *must* be deducted from front drafting at arm's eye (see Fig. 2).

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## Miscellaneous Rules.

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1. The Side Form may extend to the shoulder instead of the arm size, if desired, in which case make dot M on line 7 at a point one-

half way between dot A and the junction of lines 3 and 7, and draw line 10 from dot F to dot M at the shoulder. Line 11 should be drawn from dot G to line 10 at a point about one inch below the junction of lines 4 and 10, and should be a straight line.

2. When the figure is what is termed round-shouldered, from one-fourth to one-half of an inch is taken off at the side form below dot M, at a point about one-fourth of an inch outside of line 8, and draw a curved line to line 10, at a point from three to four inches below dot M, and draw a new line from the dot just made, about one-fourth of an inch outside of line 8 to dot D, which forms the back arm shape for the side form. This is done to make the side form the same length as the center back. The cutting off below dot M shortens the Side Form, which necessitates the carrying of the Side Form about one-fourth of an inch outside of line 8, in order to make the new line the same length as the one drawn to dot M (See diagram).

3. Where the figure is very full at the back neck, there should be about one-fourth of an inch taken off of line 6, inside of dot B, and draw a line from that point with the curved end of the Square to line 1 at a point from two to three inches below dot B. (See diagram.)

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## Tracing.

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1. Pin the pattern on the cloth, and with the tracing-wheel trace the waist line from dot E to dot F, from dot F on line 10 to dot M on line 8; now trace line 8 from dot M to line 7, trace line 7 to dot A, trace line 6 from dot A to dot B, from dot B on line 1 to line 12, on line 12 to dot E, and from dot E the length of line 13, and from dot F the length of line 14. Remove pattern and cut out center back, allowing for all seams except at the neck and arm size.

2. Replace the pattern on the cloth and trace the side form on the waist line from dot G to dot H, from dot H on line 9 to dot D, from dot D on line 8 to dot M, from dot M on line 10 to line 11, and then on line 11 to dot G; now trace from dot G the length of line 15, and from dot H the length of line 16. Remove pattern and allow for seams except at arm size.



3. Make dot A on line 2 at the size of neck, using the Neck Scale on Long Arm of Square.
4. Make dot B on line 1 the size of neck, using the front Neck Scale on Short Arm.
5. Make dot C on line 1, the length of Shoulder, using the Shoulder Scale.
6. Make dot D on line 2 the size of Breast, using the Breast Scale.
7. Move Square down, place the Corner at dot C; Short Arm on line 1 and draw line 3 at Long Arm of Square.
8. Place corner of Square at dot A, Short Arm resting on dot B and make dot E on Long Arm of Square one-half inch less than length of Shoulder measure.
9. Place Corner of Square at dot E, short arm resting on dot B and make dot F one-half of width of Chest Measure from dot E on Short Arm of Square.
10. Measure the space from dot B to dot F and make dot G on line 2 the same distance from dot A that dot F is from dot B.
11. Draw line 4 from dot F to dot G.
12. Place the Corner of square at dot G the Long Arm crossing line 3 at a point one-half inch less than the length of shoulder, and draw line 5 from dot G to line 3; drop Square so the Short Arm will touch dot F, and make dot H one-half inch less than Shoulder Measure on Long Arm.
13. Place Corner of Square at dot D, Short Arm on line 2, and draw line 6 the length of Long Arm of Square and make dot I the size of Arm Measure using the Breast Scale.
14. Place Corner of Square at dot I and make dot J the length of line 9 (from dot D to H) in back drafting (Fig. 1) below dot I and make dot K one-half inch below dot I.
15. Place inside Corner of Long Arm of Square on line 6 at dot K, and draw line 7 the length of inside of Short Arm and make dot L the size of arm, using front Arm Scale.
16. Place corner of Square at dot L and make dot M two inches below dot L, and make dot N the length of Under Arm Measure below dot L.
17. Place the Long Arm of Square the exact length of the back neck (Line 6, Fig. 1) at dot G, and bring the Long Arm down to touch

line 1 at the length of Front Measure and make dot O the height of dart and dot P the length of Front Measure.

18. Draw line 8 from dot M through dot O to line 1.

19. Place inside corner of Short Arm of Square on line 1 at dot P and make dot Q at size of waist, using Waist Scale on inside of Long Arm; now draw line 9 from dot Q to dot P and make dot R the size of waist, using Scale C.

20. Place Corner of Square at dot F, Long Arm resting at junction of lines 1 and 8, and draw line 10 the length of Long Arm.

21. Dot out the Arm Hole from dot I to dot L, curving below line 7 one-half inch, and from dot L through dot H to Shoulder Line.

22. Measure the space from dot Q to dot J, and if the space be less than four and one-half inches, make dot S four and one-half inches from dot Q. Now draw line 12 from dot S to dot I that will allow one and one-half inches for each dart, the two front ones and the under arm. If the space from dot Q to dot J be more than four and one-half inches, take one-third for each dart, that is, the space should be equally divided into three darts; when the space from dot Q to dot J is more than four and one-half inches, dot S is omitted, also line 12.

23. Make dot T one and one-half inches from dot R, then make dot U three-fourths of an inch from dot T, and dot V one and one-half inches from dot U, also make a cross in the centre of each dart on line 9.

24. Place Corner of Square at cross centre of first dart, Short Arm on line 9, Long Arm crossing line 8, and make a dot on line 8; now make dot W one-half inch back from that dot; now measure the space from dot W to the Front Hem Line and make dot X the same distance from dot W that dot W is from the Front Hem Line.

25. Place Curved End of Square at dot W, inside of Long Arm resting on dot R, and draw curved line; turn Square over, place curved end of Square at dot W and draw curved line from dot W to dot T.

26. Place Curved End of Square at dot X, inside of Long Arm at dot V, and draw curved line; turn Square over, place Curved End at dot X, inside of Square at dot U and draw curved line.

27. Place Corner of Square at cross in centre of dart, Short Arm on line 9, and make a dot twelve inches below on Long Arm; now draw two straight lines from dots R and T to the dot twelve inches below; make the second dart in the same manner.

28. Place Curved End of Square at dot V and continue line 9 from dot V through dot N to dot S.

29. Make a dot one-half the distance from dot V to dot S, place the Short Arm on line 7 and draw line 13 the length of Long Arm through the dot just made.

30. Make dots Y and Z three-fourths of an inch each side of line 13 ; on line 9 now draw a straight line from dot Z to junction of lines 7 and 13, draw straight line from dot Y to line 13 four inches below line 9.

31. Place Curved End of Square at junction of lines 7 and 13, inside of Long Arm on dot Y, and draw curved line.

32. Place Corner of Square at dot P and draw a line parallel with line 10 the desired length of Skirt of Basque ; this new line is the one to trace on, also the one used in measuring for size of hips ; line 1 is not used below dot P.

33. Place the Long Arm on line 6, the Corner of Square four inches below dot S, and make dot AA two and one-half inches from Corner of Square at Short Arm.

34. Place Long Arm of Square on line 13, Corner four inches below Waist Line and make dot BB one inch from line 13 at Short Arm of Square.

35. Place Curved End of Square at dot Y inside of Long Arm from you on dot BB, and draw curved line.

36. Place Curved End of Square at dot S inside of Long Arm from you on dot AA, and draw curved line.

37. Now measure the spaces between dots I and K, J and L, (Fig. 1) and the distance from a point four inches below dot P on the center line to dot BB, less the amount for the two front darts ; and from line 13 to dot AA, and if it is more than one-half the size of Hip Measure line 16 (Fig. 1), also lines 14 and 15 (Fig. 2) should be drawn inside to make the proper size, and if less than one-half the size of Hip lines 14 and 15 (Fig. 2) should be extended the desired amount. Do not fail to regulate the size of Hips properly before tracing lining.

## TRACING.

1. When the drafting is done, pin the pattern on the lining, line 10 straight with edge of goods, allowing width for lap, and with tracing-wheel trace the Waist line first from dot P to dot Y, from dot Y on curved line to Arm-hole, from that point through dot L to dot H on line 11, from dot H to line 5 on line 5 to dot G, from dot G on line 4 to dot F, from dot F on line 10 to the junction of lines 1 and 10; from that point on line 1 to dot P, from dot P on the center line the length of Skirt. From dot Y through dot BB on line 15 trace the two front darts; remove the pattern, cut out the front, allowing for all seams except at Neck and Arm-hole.

2. Replace pattern, trace the Waist line from dot Z to dot S, from dot S on line to Armhole; now trace Armhole out to line 13 and from that point on straight line to dot Z, from dot Z on straight line to meet line 13, on line 13 the length of Skirt; now trace from dot S through dot AA on line 14 the length desired.

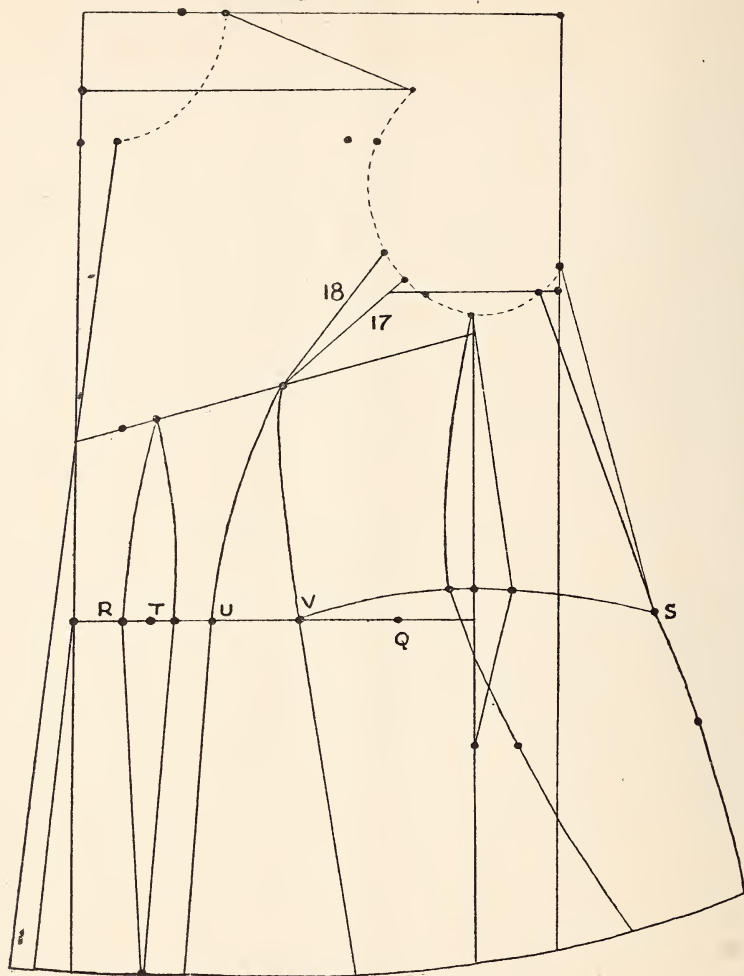
## MISCELLANEOUS RULES.

1. If the back Waist line 5, (Fig. 1) is made more than the back Waist Scale, No. 2 indicates dot Q Fig. 2, must be made the same amount less on line 9; and if the back Waist is made less than the back Waist Scale, No. 2 indicates dot Q on line 9 (Fig. 2) must be made the same amount farther from dot P, that is, if you make dot H on line 5 (Fig. 1) one-half inch less than Scale No. 2 indicates, you must make dot Q on line 9 (Fig. 2) one-half inch more than front Waist Scale indicates; that is, what is added to the back Waist line must be deducted from the front Waist line, and what is deducted from the back Waist line must be added to the front Waist line.

2. Or the size of Waist may be obtained as follows: Measure the spaces on line 5 (Fig. 1) between dots E and F, and G and H; now place the Long Arm of Square on line 9 at the point indicating the exact width of back Waist line at dot P and make dot Q at the point on Long Arm of Square, indicating the size of Waist Measure using the size of Breast Scale.



Fig. 3.



## Rules for Drafting Front with French Dart.

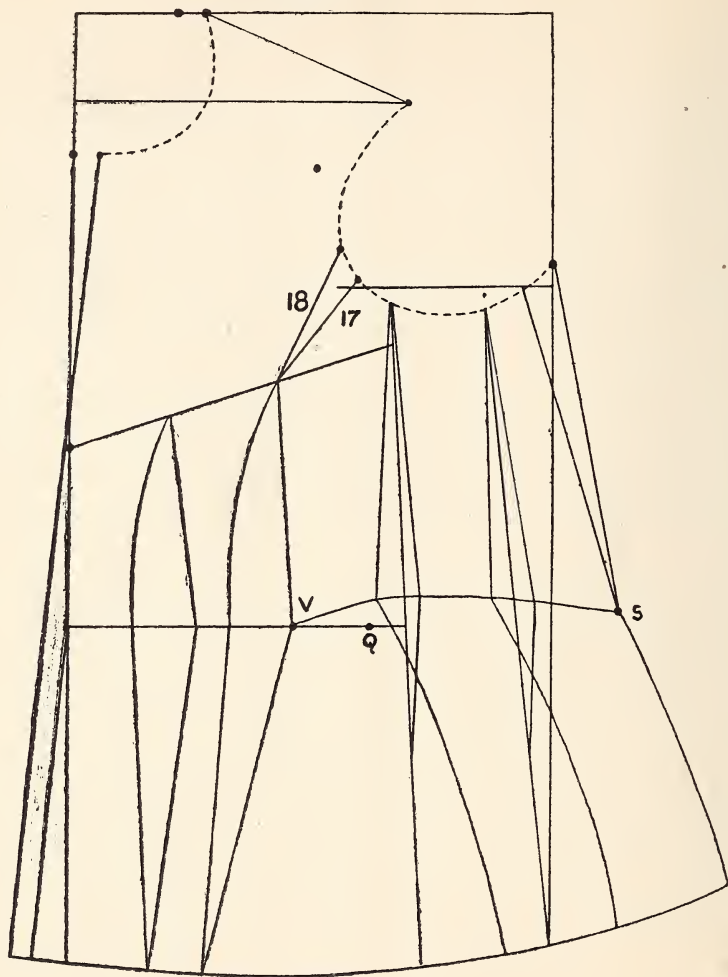
1. In drafting French Dart proceed in the same manner as rules given for drafting plain front, (Fig. 2) with the following exceptions: Make dot S five inches from dot Q, allow one and one-half inches from dot R to dot T (width of first dart) then for the second dart allow two inches from dot U to dot V, and one and one-half inches for Under Arm dart; if there is more than five inches from dot Q to dot J (See Fig. 2) omit dot S and line 12 and divide the amount in the usual way, allowing one-half inch more for second dart than for the other two. In making second dart place the Curved End of Square, the figure 18 resting at top of second dart, the inside of Long Arm on dot V; now draw line from the top of dart the length of inside of Long Arm of Square.

2. Make two dots on Armhole one inch apart, (See Diagram) place Curved End of Square at lower dot, inside of Long Arm at top of second dart, and draw curved line 17 from Armhole to top of dart; move Square toward you, place straight edge at top of dart also the straight end at upper dot and draw line 18 from dot to top of second dart.

3. In placing pattern on lining to trace, pin line 10 the front hem line straight with goods, allowing width for lap. Cut out the space between lines 17 and 18, then cut open the second dart from bottom to top; now draw lines 17 and 18 together and pin firmly, trace same as rules given for tracing Fig. 1. The effect given is the broad dart with no fullness at top of dart or Armhole.

4. If the space cut out of Armhole between lines 17 and 18 makes the Armhole too small, add the necessary amount beyond line 13 at Armhole, and dot; now trace curved line (the under-arm dart) from dot Y to meet this dot, and the Armhole will be the same size as it was before the space between lines 17 and 18 was cut out.

Fig. 4



## Rules for Drafting Front with two Under-Arm Darts.

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1. Proceed in the same manner as draft for Plain Front (Fig. 2) until you make dot Q, the space from dot Q to dot S allow five and one-half inches, one and one-half inches for the first dart, two inches for the second and one inch for each of the two under-arm darts; now dot the space from dot V to dot S into three equal parts and draw straight lines from the Armhole through these dots the length of Skirt of Basque; if this brings the first under-arm seam too near the front at Armhole, draw a new line from the Waist line up and slant it back to the proper point at Armhole.

2. For first dart dot on Waist line three-fourths of an inch from first line toward dot V and dot one-fourth of an inch on the other side toward dot S; now draw straight lines to meet at Armhole. (See diagram.)

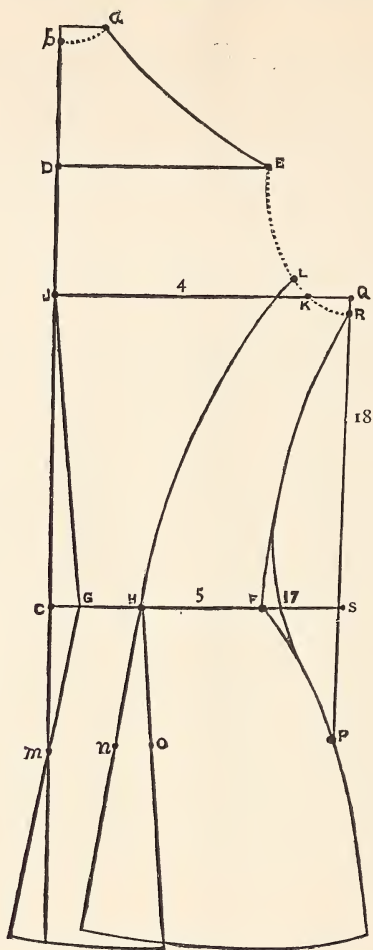
3. For second dart dot on Waist line from straight line three-fourths of an inch toward dot S, and on the other side one-fourth of an inch toward the front; now draw straight lines to meet at Armhole.

4. Draw straight lines from the back side of each under-arm dart to meet the center lines four inches below the Waist Line.

5. Place Long Arm of Square on the center lines of each under-arm dart, the Corner extending four inches below the Waist line, and dot one-half inch from you on Short Arm of Square. Regulate the size of Hips as in rules given for plain draft. (Fig. 2.)

6. If the French Dart is used with the two under-arm darts lines 17 and 18 are used; if straight darts are used lines 17 and 18 are omitted, and if there is extra fullness at Armhole it must be taken out at top of the two under-arm darts.

FIG. 5.



A DIAGRAM REPRESENTING THE BACK FOR A HALF-FITTING CLOAK.

Figure 5 is drafted the same as figure 1 with the following exceptions:

1. Make dot Q on line 4 one and one-half inches beyond dot K.
2. Place the Corner of Square at dot Q the Short Arm on line 4, and draw line 18 from dot Q at the Long Arm of Square.

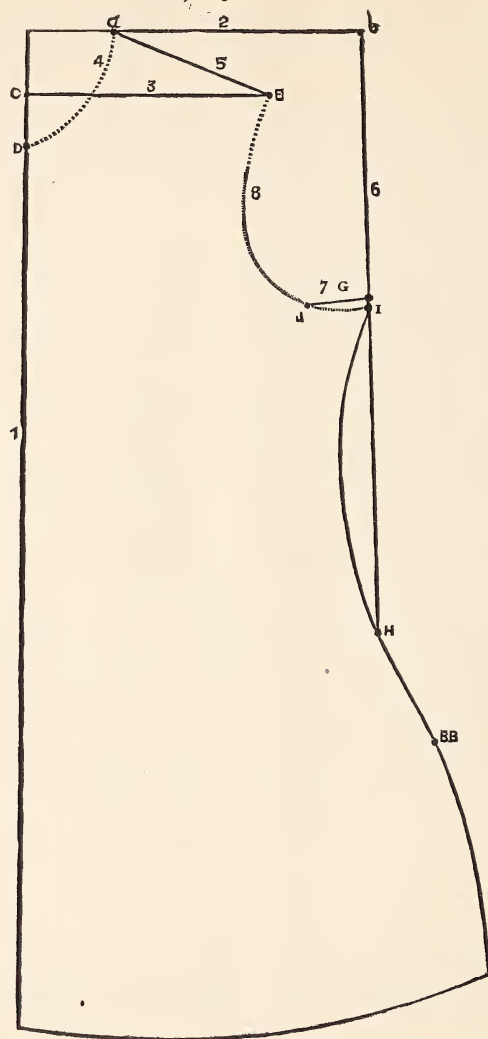
3. Without moving Square make dot R, on line 18, one-half inch below dot Q.
4. Place the Corner of Square at dot R, the Long Arm on line 18 and make dot S, on line 18 the length of the under arm measure below dot R.
5. Place the Corner of Square at dot C, the Long Arm resting on dot S, and draw line 5 from dot C, at Long Arm of Square.
6. Without moving Square make dot G on line 5, three-fourths of an inch from dot C.
7. Without moving Square make dot H on line 5, three-fourths of an inch more than the Back Waist Scale No. 1 indicates.
8. Without moving Square make dot F on line 5, one and one-half inches (actual inches) more than the size of Waist measure indicated by scale No. 2.
9. Place Short Arm of Square on line 1, the Corner at a point four inches below dot C, and make dot M.
10. Make dot N, at the point on Long Arm of Square indicating the size of Waist measure, as represented by the Back Waist Scale No. 1.
11. Make dot O, one inch beyond dot N, at Long Arm of Square.
12. Make dot P, at Long Arm of Square two and one-half inches more than the size of Waist Measure, as represented by Back Waist Scale No. 2. (That is dot P should be one inch further from dot M than dot F is from dot C).
13. Draw all the lines as represented by Fig. 5. The curved line 17 should be drawn by using the Curved End of Square.

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## THE MEASURE FOR OUTSIDE GARMENTS.

The Size of Neck, the Size of Waist and the size of Arm measures should be one inch larger. The Size of Breast and Width of Back should each be one-half inch larger, and the Size of Hip measure two inches larger than the measure taken for an inside garment.

FIG. 6.



A DIAGRAM REPRESENTING THE FRONT FOR A HALF-FITTING CLOAK.

1. Make dot B, on line 2, one and one-half inches less than the size of Breast Scale on Long Arm of Square indicates. (The same

amount that is added to the width of back must be deducted from the size of breast in actual inches.)

2. Measure line 9 in Fig. 5, and make dot H one-fourth of an inch more than the length of line 9, below dot G, on line 6.

3. Make dot I on line 6, one-fourth of an inch below dot G.

4. Draw line 7 from dot G.

5. Make dot J, on line 7, one and one-half inches less than front Arm scale on the inside of Short Arm of Square indicates. (The same amount should be deducted from the depth of Arm Size that is deducted from the size of Breast Measure).

6. Line 8 should be drawn from dot E, through dot J to dot I, on line 6.

7. Place the Curved End of Square at dot I, inside of Long Arm on dot H, and draw a curved line from dot I to dot H.

8. Make dot BB, four inches below dot H, at a point indicating one-half the size of Hip measure, and draw a curved line from dot H through dot BB, the length of skirt of cloak.

## CHILDREN'S GARMENTS.

1. The back for a child is drafted the same as for an adult, except lines 11, 12, and 13 are usually omitted, and line 14 should be drawn from dot F. The curved line 17 (Fig. 5) is usually put in large or small as desired.

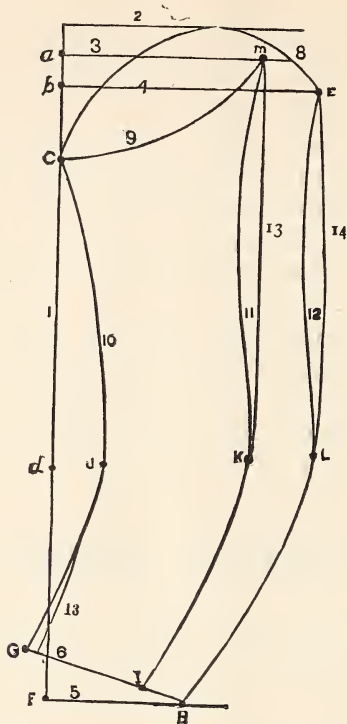
2. The front is drafted same as Fig. 2, except there is usually only one dart put in, either in front or under the arm. Line 12 is omitted and line 14 drawn from dot J instead of dot S, on account of the Hip measure being small and not requiring so much spring for the hips.

If there should be nothing for darts a sufficient quantity may be added to line 6 to make a small dart.

The front shoulder for a child is usually made the same length as the back shoulder.

3. In finding the *amount for darts* refer to miscellaneous rules for drafting (Fig. 2.)

FIG. 7.



A DIAGRAM REPRESENTING THE DRAFTING FOR A SLEEVE.

## RULES FOR DRAFTING.

In addition to the measures given in the rules for taking the measure for a sleeve, a test measure should be taken by passing the tape around the fleshy part of the arm just below the shoulder joint.

And there should also be two inches added to the size of Arm measure for the size of Sleeve Head.

1. Lines 1 and 2 are obtained in the same manner as Fig. 1, and without moving Square make dot A on line 1 one inch below junction of lines 1 and 2. Make dot B on line 1 one-half inch below dot A.

2. Make dot C on line 1 one-fourth of the size of Sleeve Head, below junction of lines 1 and 2. Make dot D on line 1 the same dis-

tance below the junction of lines 1 and 2 as the measure taken from Point of Shoulder to the Elbow.

3. Place Corner of Square at dot A, Long Arm on line 1, and draw line 3.

4. Draw line 4 from dot B parallel with line 3.

5. Make dot E on line 4 one-half of the Sleeve Head measure from dot B.

6. Place the Corner of Square at dot D, Short Arm on line 1, and make dot J at Long Arm of Square one inch from dot D.

7. Without moving Square make dot K at Long Arm of Square at a point indicating one-half the size of Elbow measure from dot D, and make dot L two inches beyond dot K.

8. Make dot F on line 1 the length of Arm measure below the junction of lines 1 and 2.

9. Place Corner of Square at dot F, Long Arm on line 1, and draw line 5 from dot F at Short Arm of Square.

10. Make dot G one inch outside line 1 at a point two inches above dot F.

11. Measure from dot G and make dot H on line 5 one-half inch more than half the Wrist measure.

12. Now draw line 6 from dot H to dot G and make dot I on line 6 one-half inch from dot H.

13. Draw line 8 with crayon or pencil from dot C to dot E, so as to touch line 2, making a good curve for the Sleeve Head.

14. Ascertain the exact length of line 8. Now make dot M on line 3, the remainder of Sleeve Head measure from dot C.

15. Draw line 9 by a sweep of one-half of the size of Sleeve Head from dot M to dot C, or by dotting it out with pencil or crayon.

16. Place Curved End of Square at dot J, inside of Long Arm on dot C, and draw curved line from dot C to dot J. Now place Curved End of Square at dot J and finish line 10 from dot J to dot G.

17. Place Curved End of Square at dot M inside of Long Arm on dot K and draw line 11; turn Square over, place Curved End at dot K and finish line 11 from dot K to dot I.

18. Draw line 12 in the same manner as line 11, from dot E through dot L to dot H. If the proper curve is not obtained at dots K and L for the elbow, place curve of Square on inside of lines 10 and

11 at the elbow and draw short curved lines, giving a good curve at elbow.

19. If the distance from dot C to line 11, and from dot C to line 12 combined does not equal the test measure, lines 13 and 14 should be drawn from dots M and E to dots K and L, at a point equal the amount of the test measure, and may be curved outward if necessary, to give the required amount.

20. Place Corner of Square at dot J; Long Arm one-half inch inside of dot C on line 6 and draw straight line.

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## A TIGHT-FITTING CLOAK.

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The Back for a Tight-fitting Cloak is drafted the same as Fig. 1, with the following exceptions:—

1. After making dot D the width of Back on line 4, make a dot three-fourths of an inch beyond; now make dot N one-half inch below the dot just made on line 4.

2. Make dot F one-half inch more than the Back Waist Scale No. 1 indicates.

3. Make dot H three-fourths of an inch more than the Back Waist Scale No. 2 indicates, and make dot J one-half inch more than the Back Waist Scale No. 1 indicates.

4. Make dot L one and three-fourths inches more than the size of Waist Scale No. 2 indicates.

5. Draw line 8 from junction of lines 3 and 7, through dot D to dot N.

6. Draw line 9 from dot N to dot H on line 5.

The front of a Tight-fitting Cloak is drafted the same as Fig. 2, with the following exceptions:—

1. Make dot D on line 2, three-fourths of an inch less than the size of Breast Scale on Long Arm of Square indicates. (The same amount that is added to the width of Back must be deducted from the size of Breast in actual inches).

2. Make dot J on line 6 one-fourth of an inch more than the length of line 9 in Figure 1 below dot I.

3. Make dot K on line 6 one-fourth of an inch below dot I.
  4. Draw line 7 to dot I.
  5. Make dot L on line 7 three-fourths of an inch less than Front Arm Scale on inside of Short Arm indicates. (The same amount should be deducted from the depth of Arm Size that is deducted from the size of Breast Measure.)
  6. The Arm Shape should be drawn through dot L to dot K on line 6.
  7. Only one dart is usually put in front, which should be made from two and a-half to three inches from the front hem line according to the size of Waist.
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## LOOSE-FITTING GARMENTS.

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1. The drafting for loose-fitting garments is performed in the same manner as when drafting Figs. 1 and 2, the only change being made at the waist line, which is done by not putting in the front darts. If it is desirable to make the garment half-fitting, one small dart should be put in front.

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## PRINCESS DRESS.

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1. A Princess Dress is drafted the same as Figs. 1 and 2. Lines 13 and 14 and lines 15 and 16 (Fig. 1) are extended the desired length of skirt of dress, sloping gradually to give the proper width of skirt.

Line 1 (the front hem line) and line 15 (Fig. 2) should be carried down the entire length of skirt in front.

Lines 13 and 14 should also be carried down to give the proper length of side front.

## A FRENCH BACK.

The French back is drafted like Fig. 1, except lines 10, 11, 14 and 15 are omitted. Dot E should be made three-fourths of an inch from dot C on line 5 ; dot H is usually made a little less than the Back Waist Scale No. 2 indicates.

For skirt of basque, make dot I one-half inch outside of line 1. Now place Curved End of Square at dot E inside of Long Arm on dot I and draw line 13.

Where the French back is used only one dart is usually put in front. For finding the amount for darts refer to miscellaneous rules for drafting (Fig. 2).

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